IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

CYTOLOGIX CORPORATION,

Plaintiff,

v.

CIVIL ACTION NO. 04-11783 (RWZ)

VENTANA MEDICAL SYSTEMS, INC.,

Defendant.

DEFENDANT VENTANA MEDICAL SYSTEMS, INC.'S MEMORANDUM IN OPPOSITION TO PLAINTIFF'S COMBINED MOTION FOR CLAIM CONSTRUCTION AND SUMMARY JUDGMENT OF INFRINGEMENT

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TABLE OF ABBREVIATIONS

CytoLogix Plaintiff CytoLogix Corp.

Ventana Defendant Ventana Medical Systems, Inc.

'261 patent U.S. Patent No. 6,541,261

'693 patent U.S. Patent No. 6,183,693

Muller U.S. Patent No. 5,273,905

Potter U.S. Patent No. 5,819,842

Pl. Mem. CytoLogix Corporation's Memorandum in Support of its Combined Motion

for Claim Construction and Summary Judgment of Infringement, filed

December 13, 2005 (Docket No. 43)

Pl. Stat. CytoLogix Corporation's Statement of Material Facts to Which There is

No Genuine Dispute, filed December 13, 2005 (Docket No. 44)

Nunberg Decl. Declaration of Geoffrey Nunberg in Support of Defendant's Opposition to

Plaintiff's Combined Motion for Claim Construction and Summary

Judgment of Infringement, filed concurrently herewith

Chin Ex. The corresponding exhibit to the Declaration of Roger J. Chin in Support

of Defendant's Opposition to Plaintiff's Combined Motion for Claim

Construction and Summary Judgment of Infringement, filed concurrently

herewith

Zeliger Ex. The corresponding exhibit to the Declaration of Michael Zeliger in Support

of CytoLogix Corporation's Combined Motion for Claim Construction and Summary Judgment of Infringement, filed December 13, 2005 (Docket

No. 45)

Note: emphasis is added throughout, unless otherwise indicated.

I. INTRODUCTION

CytoLogix attempts to prove infringement of patent claims that do not exist. Through a grammatically improper sleight-of-hand, CytoLogix suggests that the phrase in claim 1 which states "moving the platform and a liquid dispenser" does not actually require moving the platform. Instead, says CytoLogix, this phrase only requires moving the liquid dispenser. Based on this erroneous premise, CytoLogix proceeds to argue for infringement by offering evidence that in the accused devices, only a liquid dispenser moves. This argument fails because CytoLogix completely ignores the claimed requirement of moving the platform. See Pl. Mem. at 16 (table, row 1). On this factual record, summary judgment of infringement must be denied.

Two claim construction issues are relevant to the resolution of this motion. First, the Court must construe the phrase "moving the platform and a liquid dispenser relative to each other." Second, the Court must construe the term "platform." As explained below, the evidence establishes that the claimed phrase requires moving both the slide platform and the liquid dispenser to dispense liquid onto slides. And the evidence also shows that the claimed "platform" is a rotary carousel on which the slides are mounted. See Appendix, infra.

CytoLogix proposes that "moving the platform and a liquid dispenser relative to each other" should be construed to mean that "[t]here is relative movement between the platform and the liquid dispenser. Relative movement may be accomplished by moving the platform, or the liquid dispenser, or both." Pl. Mem. at 7. As explained below, such a construction is at odds with the plain language of the claims, the patent specification, and the prosecution history. For this reason alone, it should be rejected.

CytoLogix's construction also should be rejected because it flies in the face of common sense. For example, if someone takes an elevator to change floors, only the elevator moves.

The building does not move. While normal English-speakers would describe this activity as

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"the elevator moves relative to the building," no one with any common sense would describe this activity as "moving the building and an elevator relative to each other" in order to change floors. This example, which directly parallels the linguistic contortions in which CytoLogix engages, belies the flawed claim construction that CytoLogix advances here.

II. BACKGROUND FACTS

Α. The Prior Art: Independently Controlled Slide Heaters on a Stationary Slide Support

A variety of slide staining devices were known and used in the prior art before 1998, when CytoLogix filed its patent application. Chin Ex. 1 at 1:31-63. These devices used a stationary slide support on which independently controlled slide heaters were mounted. For example, the Muller prior art reference, which was extensively discussed during prosecution of the '261 patent, discloses the application of liquids onto microscope slides that are mounted on a stationary support. Chin Ex. 16 at 4:4-12. Each slide is associated with a different processing station on the support, and the temperature of each processing station can be individually controlled. Id. at 3:27-28 & 29:31-33. Similarly, in the Potter reference, also discussed during prosecution, each sample is mounted on a stationary support and each sample can be heated to an independently regulated temperature using a feedback control. Chin Ex. 17 (Abstract).

Mr. Loeffler, a named inventor of the '261 patent, readily admitted that the invention did not concern independently controlled slide heaters on a stationary slide support (Chin Ex. 19 at 104:17-23):

- Q. Did you ever design a slide processing device in which the slide platform did not move at all but which had the capability of heating some slides to a first defined temperature and heating other sides to another defined temperature?
- A. No, we didn't do that.

Consistent with this testimony, the patentees conceded that the prior art had already "disclose[d] heating of stationary samples to different temperatures." Chin Ex. 5 at 5; see also

Chin Ex. 12 at 5 ("Muller et al. also provides for both electrical and fluid temperature regulation of the stationary slide supporting block").

В. The '261 Patent: Independently Controlled Slide Heaters on a Moving Slide Platform

The patentees distinguished the Muller and Potter prior art by telling the Patent Office that those "references relate to systems in which the samples are stationary." Chin Ex. 10 at 4. By contrast, the '261 patent "provide[s] independent temperature control to heating elements on a moving platform." Id. What was new, according to CytoLogix, was the ability to control multiple slide heaters that were mounted on a moving slide platform.

The patentees also stated that in contrast to the wiring required to heat stationary slide samples, "the type of hard-wired temperature control mechanism that heats and cools" multiple slide heaters was difficult to implement on a moving slide platform. Chin Ex. 1 at 2:16-19. More specifically, the patentees asserted that the multiplicity of "wires on a service loop between a stationary computer and a moving slide stainer" required a new approach to electronic control of the slide heating elements mounted on a moving platform. Id. at 2:26-29.

The patent goes on to explain the solution to this moving platform wiring problem: mount some of the required heating circuitry directly on the moving platform to reduce the number of wires connecting the stationary control computer and the heaters on the moving platform. *Id.* at 2:52-59. The patentees explained (Chin Ex. 10 at 4):

> In accordance with the present invention, the number of wires required between the stationary computer and the moving heating elements is substantially reduced by mounting additional temperature controller electronics on the moving platform to regulate the electrical power to the heating elements in response to data received from the computer.

The very purpose of the new wiring configuration was to provide for a moving, rotary slide platform. As an inventor of the '261 patent confirmed, "if the slide platform had been

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stationary as opposed to rotating, then there was no need to reduce the number of wires between the platform and the base." Chin Ex. 19 at 109:15-20.

C. The Accused Devices

The accused devices in this litigation are the BenchMark XT and BenchMark LT.¹ In these devices, the microscope slides are placed on a slide support which is locked into place in a stationary position before slide processing commences. The slide support in the accused devices does not, and cannot, move during slide processing. As Ventana's Rule 30(b)(6) witness explained, in the accused devices "the slides don't move once they're fixed in place and the run begins, there's no motion." Zeliger Ex. 2 at 47:15-17. The slide support and the slides mounted thereon are held stationary by "40 pounds per square inch of pressure in four locations against that [i.e., the slide support] to hold it in place very, very securely." Id. at 60:7-9. Unlike the alleged invention of the '261 patent, the accused devices do not use a moving slide carousel.

In its summary judgment motion, CytoLogix does not – because it cannot – allege that the "slide platform" is moving in the accused devices. *See* Pl. Mem. at 16 (table, row 1). Instead, CytoLogix's motion relies solely on rotating movement of the <u>liquid dispenser</u> in the accused devices to support its assertion of infringement. *Id.* at 2. In doing so, CytoLogix ignores the claimed requirement of "moving the platform" upon which "two or more microscope slides" are placed. Chin Ex. 1 at 12:16-21. CytoLogix's failure to come forward with any evidence (much less undisputed evidence) that the accused devices utilize a moving platform as required by the claims mandates denial of CytoLogix's motion for summary judgment.

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¹ Ventana's prior-generation BenchMark system, the subject of prior litigation between the parties, has not been accused of infringing the '261 patent and is not at issue in this case.

III. THE PRINCIPLES OF CLAIM CONSTRUCTION

The first step in any infringement analysis is to construe the claims as a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). Claims are to be interpreted in view of the intrinsic evidence, *i.e.*, the claims, the patent specification, and the prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). It is also within the Court's discretion to consider extrinsic evidence to help "determine what a person of ordinary skill in the art would understand claim terms to mean," so long as it is "considered in the context of the intrinsic evidence." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1319 (Fed. Cir. 2005).

Claim terms are generally given their ordinary and customary meaning. However, "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Id. at 1313. Language that appears in other claims is highly relevant, because a court "must not interpret an independent claim in a way that is inconsistent with a claim which depends from it." Wright Med. Tech., Inc. v. Osteonics Corp., 122 F.3d 1440, 1445 (Fed. Cir. 1997). Likewise, the patent specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." Phillips, 415 F.3d at 1315 (citations omitted). "Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question." SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001); see also Phillips, 415 F.3d at 1316 ("In light of the statutory directive that the inventor provide a 'full' and 'exact' description of the claimed invention, the specification necessarily informs the proper construction of the claims.").

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The Court must also consider the prosecution history. Because the prosecution history contains the complete record of all the proceedings before the Patent Office, including representations made by the applicant regarding the scope of the claims, it "is often of critical significance in determining the meaning of the claims." Vitronics, 90 F.3d at 1582. "The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution." Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995).

IV. THE PROPER CONSTRUCTION OF "MOVING THE PLATFORM AND A LIQUID DISPENSER RELATIVE TO EACH OTHER"

The phrase "moving the platform and a liquid dispenser relative to each other" should be construed to mean moving the platform relative to a liquid dispenser and also moving a liquid dispenser relative to the platform. The slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide.

A. The Language of the Claims Expressly Requires Moving Both the Slide Platform and the Liquid Dispenser

1. The Plain Language of Claim 1 Requires Moving Both the Slide Platform and the Liquid Dispenser

The asserted claims call for "moving the platform and a liquid dispenser relative to each other." Chin Ex. 1 at 12:21-22. This claim language requires moving both "the platform" and "a liquid dispenser." It does not permit moving only one of them.

This clear meaning is confirmed by basic principles of grammar. In the claims, both "the platform" and "a liquid dispenser" are direct objects of "moving." Nunberg Decl. ¶¶ 8-9. Under basic rules of grammar for the English language, the action of the verb "moving" applies to both direct objects, and therefore, both objects must move. Id. ¶¶ 9-10. Hence, the phrase "moving the platform and a liquid dispenser" is linguistically equivalent to "moving the

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platform" and "moving a liquid dispenser." Id. ¶ 10. The plain language of the claims requires moving both "the platform and a liquid dispenser."

The use of the term "each other" in the claims further confirms that both the slide platform and the liquid dispenser must move. "Each other" is a reciprocal pronoun that requires mutual action of both objects, Nunberg Decl. ¶ 12; AMERICAN HERITAGE DICTIONARY 1459 (4th ed. 2000) (Chin Ex. 20), as confirmed by the Chair of the Usage Panel for the AMERICAN HERITAGE DICTIONARY and the author of the dictionary's Usage Note for "each other." Nunberg Decl. ¶¶ 3 & 11. Thus, under accepted rules of English grammar, the phraseology used in the '261 patent claims — moving A and B relative to each other — means moving A relative to B and moving B relative to A.² Nunberg Decl. ¶ 13; II T. GIVÓN, ENGLISH GRAMMAR 82 (1993) (Example 99) (Chin Ex. 21).

CytoLogix counters that the claim language merely requires that there be "relative movement between the platform and the liquid dispenser," Pl. Mem. at 7, even though the phrase "relative movement" appears nowhere in the claims or the patent specification. CytoLogix's linguistic sleight-of-hand is inconsistent with the claim language, and violates basic principles of English syntax and semantics. Nunberg Decl. ¶ 14. In effect, CytoLogix seeks to rewrite the claim language as follows (id. ¶ 15):

moving <u>either</u> the platform <u>or</u> and a liquid dispenser relative to the each other.

This rewriting improperly substitutes the disjunctive "or" in place of the conjunctive "and," *id.*, as CytoLogix admits in its brief. Pl. Mem. at 7 ("Relative movement may be accomplished by

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² The use of the reciprocal pronoun further requires that the movement of A (slide platform) and the movement of B (liquid dispenser) be roughly simultaneous and related. ENGLISH GRAMMAR at 83 (Chin Ex. 21); Nunberg Decl. ¶ 13.

moving the platform, <u>or</u> the liquid dispenser, <u>or</u> both."). It also eliminates the reciprocal pronoun "each other." Such an attempt to rewrite the claim language is impermissible.³

CytoLogix's construction may be convenient for its infringement position, but it makes nonsense of the English language. Take, for example, the following statement: "moving the building and an elevator relative to each other" in order to change floors. This phraseology, like the claim language that it directly parallels, requires moving both objects (the building and the elevator). It is thus a conspicuously improper and bizarre way of describing movement of the elevator, because a proper grammatical construction requires the building to move as well – but buildings are not moved in order to change floors. Likewise, the disputed claim language ("moving the platform and a liquid dispenser") is fundamentally inconsistent with an interpretation that covers a non-moving platform. This simple example illustrates how CytoLogix's proposed construction is inconsistent with the English language and common sense. See Nunberg Decl. ¶ 16.

2. The Dependent Claims Compel this Construction

Claim 7, which depends directly from claim 1, unambiguously confirms that the slide platform of claim 1 is a moving platform. Claim 7 recites (Chin Ex. 1 at 12:62-64):

A method of processing samples mounted on microscope slides as claimed <u>in claim 1</u>, wherein said heating elements are mounted on <u>said moving platform</u>.

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³ Even if CytoLogix's proposed construction were plausible (and it is not), mere plausibility cannot justify the proposed broad construction. If there are two plausible constructions of the claim language, the narrower interpretation must be adopted. "Where there is an equal choice between a broader and a narrower meaning of a claim, and there is an enabling disclosure that indicates that the applicant is at least entitled to a claim having the narrower meaning, we consider the notice function of the claim to be best served by adopting the narrower meaning." *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996); *see also Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1344 (Fed. Cir. 1998); *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 93 F.3d 1572, 1581 (Fed. Cir. 1996) ("to the extent that the claim is ambiguous, a narrow reading which excludes the ambiguously covered subject matter must be adopted").

By using the phrase "said moving platform" in claim 7, the patentees necessarily are referring back to the very same platform introduced in claim 1.4 The description of that platform as a "moving platform" in claim 7 confirms the ordinary grammatical construction of claim 1: "moving the platform and a liquid dispenser" necessarily requires the presence of a "moving platform." See Wright, 122 F.3d at 1445.

The Federal Circuit, in *Masimo Corp. v. Mallinckrodt Inc.*, 18 Fed. Appx. 852 (Fed. Cir. 2001) (Chin Ex. 23),⁵ found such an argument to be "most compelling." *Id.* at 856. In that case, independent claim 16 called for an "adaptive filter." Dependent claims 18, 19 and 21 referred to "said adaptive canceler." The Federal Circuit concluded (*id.*):

Thus, Masimo drafted the claims such that the term "adaptive filter" provided the antecedent basis for the phrase "said adaptive canceler." Accordingly, those claim terms must be construed to mean the same thing, *i.e.*, an adaptive noise canceler, the only type of adaptive filter disclosed in the '642 patent.

See also Astra Aktiebolag v. Andrx Pharms., Inc., 222 F. Supp. 2d 423, 447 (S.D.N.Y. 2002), aff'd, 84 Fed. Appx. 76 (Fed. Cir. 2003). The "most compelling" reasoning of Masimo applies with even greater force here. In Masimo, the Federal Circuit was faced with differing claim language ("adaptive filter" versus "said adaptive canceler") and still found them to be

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⁴ See 2 PATENT PRACTICE § II.C.3.c at 10-18 (5th ed. 1993) ("the word 'said' so pointedly reminds the practitioner that the element referred to must have been introduced somewhere earlier in the claim"); Medtronic, Inc. v. Guidant Corp., No. Civ. 00-1473, 2004 WL 1179338, at *34 (D. Minn. May 25, 2004) ("The term 'said' is a word commonly used in patent claims and it is used to refer back to a particular previous element."); Masimo, 18 Fed. Appx. at 856 (Chin Ex. 23); see also Chin Ex. 19 at 28:25-29:6 ("Q. But there's only one platform that's referred to in claim 1. That's the slide platform, right?

A. Right. Q. And claim 7 refers to that platform as, 'said moving platform,' right? A. That's what it says.").

⁵ Although *Masimo* was not published in the Federal Reporter, this opinion still constitutes persuasive authority. *See Giese v. Pierce Chem. Co.*, 43 F. Supp. 2d 98, 104 n.1 (D. Mass. 1999).

synonymous. Here, the terminology is essentially the same ("moving the platform" versus "said moving platform").6

In its opening brief, CytoLogix completely ignores the dispositive language of claim 7. Instead, it relies upon dependent claim 3 and the doctrine of claim differentiation. Pl. Mem. at 8. As an initial matter, claim differentiation "is not a hard and fast rule of construction" and "can not broaden claims beyond their correct scope." Kraft Foods, Inc. v. International Trading Co., 203 F.3d 1362, 1368 (Fed. Cir. 2000) (citations omitted). And here, the doctrine does not apply at all. This is so because claim 3 does not merely specify that the platform is moving, as CytoLogix misleadingly implies. Rather, claim 3 adds the entirely new requirement, not recited in claim 1, that the moving platform be "capable of indexing slides adjacent to a stationary liquid dispensing location." Chin Ex. 1 at 12:29-32. This defeats any presumption arising from the doctrine of claim differentiation because the new requirement recited in claim 3 is fully sufficient to differentiate claim 3 from claim 1, irrespective of the moving platform issue. Kraft, 203 F.3d at 1368 ("that the claims are presumed to differ in scope does not mean that every limitation must be distinguished from its counterpart in another claim, but only that at least one limitation must differ").

В. The Patent Specification Requires Moving Both the Slide Platform and the Liquid Dispenser

"The claims are directed to the invention that is described in the specification; they do not have meaning removed from the context from which they arose." Netword, LLC v.

⁶ Moreover in Masimo, the only type of "adaptive filter" disclosed in the specification was an "adaptive canceler." Likewise, in the '261 patent, the only type of slide platform disclosed is a moving platform. See Section IV.B, infra.

⁷ The "liquid dispensing <u>location</u>" should not be confused with the "liquid dispenser" required by claim 1. The "location" is the place or station at which "liquid dispensing" occurs. According to claim 3, this "location" is "stationary," meaning that there is a single place to which both the slide platform and the liquid dispenser move, and where "liquid dispensing" occurs. See Chin Ex. 1 at 5:25-35.

Centraal Corp., 242 F.3d 1347, 1352 (Fed. Cir. 2001). Here the invention, whenever described in the specification, always has heaters on a moving slide platform.

The entire specification of the '261 patent – from the abstract to the end – describes the moving slide platform as inseparable from the invention itself. To begin with, the abstract of the '261 patent describes the invention as pertaining to: "An automated slide stainer with slides mounted in a horizontal position on a <u>rotary carousel</u>." Chin Ex. 1 (Abstract). This description of the invention in the abstract is compelling evidence of what the patentees considered to be their invention. *SciMed*, 242 F.3d at 1342.

The patentees also provide a "Summary of the Invention" of the '261 patent. This section is particularly significant because by law, "[s]uch summary should, when set forth, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed." 37 C.F.R. § 1.73. The description in the Summary of Invention provides ample evidence that the patentees always contemplated that their invention required the use of a moving slide platform.

For example, in the "Summary of the Invention," the patentees explain the shortcomings of the prior art, and how wiring difficulties arise if multiple slide heaters are placed on a moving slide platform. Specifically, the patentees explain how the multiplicity of wires required to power and control each heating block presented a challenge that deterred others from making an invention that uses heaters on a moving slide platform (Chin Ex. 1 at 2:26-29):

Placing all of these wires on a service loop between a stationary computer and a <u>moving slide stainer</u> presents yet another difficulty, increasing the cost of manufacture and servicing.

The "Summary of the Invention" also describes two, and only two, aspects of the invention. In the first aspect of the invention, "a moving plating, preferably a carousel, is adapted to support a plurality of microscope slides bearing biological samples." *Id.* at 2:30-32.

In the second aspect of the invention, "a plurality of heaters that can each heat at least one slide are associated with a moving platform that is adapted to support a plurality of microscope slides." *Id.* at 2:40-43. These are each described as an "aspect of the invention." *Id.* at 2:30 & 2:40. These are not descriptions of preferred embodiments; they are descriptions of what the patentees considered to be their invention. Such statements are highly probative of the proper claim construction because they are found in the "Summary of the Invention" section of the patent, and because they describe "the invention" as one that uses a moving slide platform. *See Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1348 (Fed. Cir. 2004); *SciMed*, 242 F.3d at 1343.

The "figures and embodiments" of the patent also are relevant to "whether the specification read as a whole suggests that the very character of the invention requires the limitation be a part of every embodiment." *Alloc, Inc. v. International Trade Comm'n*, 342 F.3d 1361, 1370 (Fed. Cir. 2003); *see also Astrazeneca AB v. Mutual Pharm. Co.*, 384 F.3d 1333, 1340 (Fed. Cir. 2004) ("the patentee's choice of preferred embodiments can shed light on the intended scope of the claims"). The patentees explained that the figures and embodiments are presented to "illustrat[e] the principles of the invention." Chin Ex. 1 at 3:1-2. In the '261 patent, the patentees consistently illustrate their invention as having a moving slide platform.

In contrast to the many statements in the specification that a moving slide platform is the very essence of the alleged invention, the patent does not describe any embodiment with a stationary slide platform. Rather, both disclosed embodiments show and describe a moving slide platform. Consistent with the claim language, the specification describes an invention where both the slide platform and a liquid dispenser move (*id.* at 5:14-19):

Referring to Fig. 1, positioned above the slide rotor 3 is the reagent rotor 4. This reagent rotor is similarly adapted to rotate on the assembly base 2 and is driven by another servo motor (not shown) under computer control (not shown). The <u>reagent rotor 4 and the slide rotor 3 rotate</u> independently of each other.

In the first embodiment of the invention (*cf. id.* at 3:56), the patentees explain that slide "heaters and sensors [on the slide platform] <u>are in frequent motion</u>." *Id.* at 5:1.

A "service loop" is necessary to connect the moving slide platform to the "stationary temperature controller": "Sufficient extra length is provided in the wires [of the service loop] so that as the slide rotor rotates, the service loop travels around the slide rotor axis." *Id.* at 5:1-6.

The second embodiment of the invention (cf. id. at 9:63) also utilizes a service loop connected to heaters on moving slide platform ("slide rotor"). Id. at 10:16 & 10:56-57. Again, the design was dictated by movement of the slide heaters on the slide platform: it "was driven by the need to minimize the number of wires in the <u>flexible</u> cable (service loop 90) between the heaters and the computer." Id. at 10:38-40. All of the circuitry designs suggested for the second embodiment address this stated need. Id. at 11:50-67. The very purpose of these wiring configurations is to permit movement of the slide platform. Chin Ex. 19 at 109:4-20.

Notwithstanding the clear statements in the patent specification, however, CytoLogix misleadingly attempts to redefine the alleged invention by focusing on the "importance of indexing and independent slide heating." Pl. Mem. at 9. CytoLogix insists that the novelty of the '261 patent lies in the ability for "slides to be heated to different temperatures." *Id.* at 2-3. These arguments fail for at least two reasons.

First, although CytoLogix asserts that "[u]nlike slide stainers existing in the prior art, the invention claimed by the '261 patent allows for individual slides to be heated to different temperatures," Pl. Mem. at 2-3, this assertion is demonstrably untrue. CytoLogix recently told the Patent Office that the prior art "Tseung et al. and Brinker et al., like Muller et al. and Potter et al., disclose heating of stationary samples to different temperatures." Chin Ex. 5 at 5. This concession is confirmed by an examination of the prior art Muller patent, which discloses an apparatus where "the temperature of each processing station and of process fluids input thereinto is individually controlled." Chin Ex. 16 at 29:31-33; see also Chin Ex. 9 at 4.

Second, CytoLogix's contention that the '261 patent "specification explains the importance of indexing" (Pl. Mem. at 9; see also Chin Ex. 14 at 4) is, itself, an admission that the slide platform must move. The definition of "index" is (VII OXFORD ENGLISH DICTIONARY 854 (1989) (Chin Ex. 22)):

To <u>rotate</u> (work to be machined, or a machine part) through a given aliquot part of a complete turn; to position in accordance with <u>intermittent motion</u> of this kind; hence, to transfer or <u>move from one predetermined position to another</u> in order that different locations may be machined or different operations performed.⁸

See also Chin Ex. 19 at 79:18-21 ("indexing" means "rotating the carousels"). By stressing the "importance of indexing" the slides to the reagent dispenser, the patentees further confirmed that the claims require a moving slide platform that rotates.

The specification is highly relevant to the claim construction inquiry because the claims may not "enlarge what is patented beyond what the inventor has described as the invention." Netword, 242 F.3d at 1352. In this case, the inventors of the '261 patent never designed any system for controlling heaters on a stationary slide platform. Chin Ex. 19 at 104:17-23. Indeed, Mr. Loeffler was unable to identify anything in the description of the '261 patent "which demonstrates that you and your co-inventors contemplated the use of a non-moving slide platform as being within the scope of your invention." Id. at 106:6-21. A construction that is broader than "the only possible" implementation shown in the specification, and which "is outside the stated purpose of the invention," renders the claims invalid for lack of written description. Gentry Gallery, Inc. v. Berkline Corp., 134 F.3d 1473, 1479-80 (Fed. Cir. 1998). CytoLogix's proposed construction does exactly that, and therefore should be rejected. Digital

⁸ Although there are six definitions given for the verb "index," the quoted definition is the relevant one because it is the only definition that relates to the field of engineering. Chin Ex. 22 at 854.

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⁹ While inventor testimony is extrinsic evidence, it is relevant for providing an "explanation of the problems that existed at the time the invention was made and the inventor's solution to these problems." *Voice Techs. Group, Inc. v. VMC Sys., Inc.*, 164 F.3d 605, 615 (Fed. Cir. 1999).

Biometrics, 149 F.3d at 1346 ("we adopt the narrow claim construction that is clearly supported by the written description").

C. The Prosecution History Requires Moving Both the Slide Platform and the Liquid Dispenser

1. The Parent '693 Patent Prosecution History

The "problem overcome by the present invention" was "the problem of controlling heating elements on a moving platform."

The parent '693 patent and the child '261 patent share the same initial application and the same written description. Accordingly, the prosecution history of the '693 patent may be considered in construing the terms of the '261 patent. *Masco Corp. v. United States*, 303 F.3d 1316, 1324 (Fed. Cir. 2002). In fact, the prosecution history of the parent '693 patent has special relevance here because the asserted claims of the '261 patent, as originally submitted to the Patent Office in the '261 patent application, are a near-verbatim recitation of application claims 14 and 16 from the '693 patent prosecution. ¹⁰ Because CytoLogix patterned claims of the '261 patent after claims submitted in the '693 patent prosecution, it has "affirmatively linked the meaning" of the '261 patent claims with those considered in the '693 patent prosecution. Therefore, statements made in the parent '693 patent prosecution apply "with equal force to [the] subsequently issued" '261 patent. *See Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999).

In prosecuting the '693 patent (including application claims 14 and 16), the patentees made unequivocal statements describing the scope of their invention, in an Amendment dated August 13, 1999. For example, in distinguishing the "stationary heater" disclosed in the prior art, the patentees explained that "[m]ounting independently-controlled heaters and their

¹⁰ Compare Chin Ex. 12 at 3 with Chin Ex. 3 at 3; see also Chin Ex. 10 at 3 (In the application for the '261 patent, "Claim 1 has been amended to parallel the apparatus claims which were issued in parent patent 6,183,693. A new method Claim 5 paralleling Claim 8 of the 6,183,693 patent has been added.").

controllers on a moving platform (as applicants have done) is an important inventive step." Chin Ex. 3 at 6 (first emphasis in original). They further stated that "[f]reedom to move both the samples and the reagents allows greater flexibility and speed in executing the relevant chemistries on the samples." *Id.* And they expressly distinguished the prior art on the basis that the claimed slide heaters are on a moving platform: "it is apparent that there is no suggestion in the prior art of heating microscope slides on a moving platform such that different slides are heated to different temperatures." *Id.* at 7. Certainly, there was no novelty in heating stationary samples, like a kitchen stove. *See* Chin Ex. 5 at 5.

Following another rejection of the pending claims, the patentees again stressed the importance of the moving platform to their invention, in an Amendment dated July 5, 2000. There, they explained that the prior art "references relate to systems in which the samples are stationary." Chin Ex. 4 at 5. By contrast, the invention was designed "in order to provide independent temperature control to heating elements on a moving platform." *Id.* The "problem overcome by the <u>present invention</u>" was "the problem of controlling heating elements on a moving platform." *Id.*; see also id. at 4 ("present invention" has "moving heating elements"); id. at 5 (prior art "failed to suggest temperature control circuitry mounted on the moving platform"); id. (prior art "references fail to disclose any moving platform").

The '693 patent is presently the subject of reexamination proceedings in the Patent Office, where all claims stand rejected. In attempting to overcome these rejections, the patentees continue to stress the difference between slide heaters on the prior art stationary platforms as opposed to the invention's moving slide platform. More specifically, in a Patent Owner's Statement submitted to the Patent Office earlier this year, while the present litigation was pending, the patentees stated that the prior art Muller and Potter "references related to systems in which the samples were <u>stationary</u>. As such, they did not address the problem of controlling heating elements <u>on a moving platform</u>." Chin Ex. 5 at 4. The

patentees also stated that although these references "disclose heating of <u>stationary</u> samples to different temperatures," there is "no teaching in either Muller et al. or Potter et al. toward a solution to a problem associated with a <u>moving carousel</u>." *Id.* at 5; *see also id.* at 9. The invention, by contrast, necessarily utilizes a moving slide platform. The patentees explained that the invention has "temperature controllers <u>on the moving platform</u> to regulate the electrical power to the heating element sets." *Id.* at 3.

Following a rejection of the claims in reexamination, the patentees met with the Patent Examiner for an interview. In urging patentability, the patentees argued that in the prior art "there is no teaching of a temperature controller <u>on a moving platform</u> communicating with a user interface off of the moving platform." Chin Ex. 6.

Shortly after the interview, the patentees filed a response with the Patent Office. They reiterated their argument that the Muller prior art was different from the invention because it "has no moving platform, and the complicated fluidic system of Fig. 21 would teach away from a moving platform system." Chin Ex. 7 at 2. The patentees stressed that the prior art did not "teach, disclose, or suggest heating slides on a moving platform to different temperatures" or "a temperature controller, on a moving platform, that regulates power to heating elements on the platform." Id. at 3. As they stated in a bold, underlined, and capitalized heading: "The prior art does not teach heating elements capable of heating slides to different temperatures on a moving platform." Id. at 4. That fact was significant to the patentees, because they asserted that one of ordinary skill in the art "would be strongly disinclined to combine the slide heating art taught by Muller with a moving slide platform." Id. at 10. In contrast to the prior art, the patentees stressed that they invention was patentable because "heating slides to different temperatures on a moving platform yielded unexpected results." Id. at 5.

 11 See also Chin Ex. 7 at 5 ("Heating slides to different temperatures on a moving platform yielded unexpected results."); id. ("The claimed slide stainer that enables heating of slides on a moving platform

(continued...)

This emphasis on the moving slide platform also was confirmed by a sworn statement submitted by one of the named inventors: "The whole point of the patent is distributed temperature control so as to avoid the need for dozens of wires in a service loop connecting the moving [slide] platform to the stationary [computer] platform." Chin Ex. 18 at 17.

2. The '261 Patent Prosecution History

"In such a system, microscope slides are positioned on a carousel which allows individual slides to be moved into position below a dispensing station.... It is to such systems ... to which the present invention is directed."

In prosecuting the application for the '261 patent, the patentees again clearly and unambiguously confirmed what is already apparent from the plain meaning of the claims: that the slide platform and the liquid dispenser both move. The original application for the '261 patent contained four claims, application claims 1-4. Application claims 1 and 2 as originally

to different temperatures leads to unexpected results not previously thought possible: automatic processing of special stains."); id. at 6 ("Heating of slides on a moving platform to different temperatures enabled the unexpected automatic processing of special staining, a result not suggested by any of the cited references alone or in combination."); id. at 7 ("Neither Bogen (US 6,180,061) nor Bogen (US 5,645,114) claims or teaches a temperature controller on a moving platform and Muller does not even disclose a moving platform."); id. at 8 ("As noted in the original prosecution, Muller relates to a system in which the <u>samples are stationary</u>. As such, it does not address the problem of controlling heating elements on a moving platform."); id. at 10 ("it would be difficult to supply a flexible coolant line and flexible supply line from the reservoirs between the stationary base and moving platform (e.g., rotary carousel)" of sufficient diameter so as to supply different liquids to many different slides without twisting or kinking the tubing"); id. ("One of ordinary skill, looking to the Muller device, would try to avoid a plumbing interface between a stationary and moving platform"); id. at 11 ("The Examiner's reasons for placing temperature controllers on a moving platform result from impermissible hindsight."); id. at 12 ("The moving platform is closely associated with the device's fluidics. Reagents and buffers are dispensed onto slides, which are on the moving platform."); id. ("the Examiner's statement does not take into consideration the technological challenge of placing electronics on a platform that has heaters and open liquids and that stops and starts"); id. at 13 ("The claimed invention resulted from the need for minimizing drag between moving and stationary parts where many heaters on the moving part were controlled from stationary electronics."); id. ("Muller does not use a moving platform that supports microscope slides and thus teaches nothing toward a moving platform implementation."); id. at 14 ("However, conventional off-the-shelf temperature controllers such as the one cited by Muller can not be easily mounted on a moving platform."); id. at 15 ("Neither of the Bogen references singly or in combination with Muller render obvious the innovation of mounting a temperature controller on a moving platform that supports microscope slides."); id. at 16 ("As discussed above, Bogen in view of Muller fails to disclose, teach, or suggest heating elements on a moving platform having the capability to heat different temperatures as claimed in the patent under reexamination."); id. ("The references also fail to disclose, teach, or suggest a temperature controller mounted on a moving <u>platform</u> in communication with a user interface off of the moving platform.").

submitted are a near-verbatim recitation of application claims 6 and 7, which ultimately issued as the asserted claims 1 and 2 that are at issue in this litigation. *Compare* Chin Ex. 8 at 20 *with* Chin Ex. 12 at 3; *see also id.* at 4 ("New claims 6 through 9 correspond to the originally filed claims 1 through 4").

In its first Office Action, the Patent Office rejected the claims as obvious. Chin Ex. 9. In response, the patentees distinguished the prior art Muller and Potter references on the basis that their invention provided for slide heaters on a moving platform. In particular, the patentees stated that (Chin Ex. 10 at 4):

The Muller et al. and Potter et al. references relate to systems in which the samples are <u>stationary</u>. It is respectfully submitted that there is no suggestion of combining those references with Bogen et al. in order to provide independent temperature control to <u>heating elements on a moving platform</u>. More importantly with respect to the claims under consideration, because those secondary references fail to disclose any moving platform, they can provide no suggestion of addressing the problem overcome by the present invention, the problem of controlling the heating elements on a moving platform.

The patentees also made the following comments about the problems of controlling slide heaters on a moving platform with the prior art Bogen machine (*id.* at 3-4):

The large number of wires comprising the wiring harness, or "service loop" as it is commonly called, connecting the heaters on the <u>rotary carousel</u> to the computer is problematic. The wire bundle is stiff, precluding <u>smooth carousel revolution</u> and indexing. In addition, repeated flexion of the wires can cause them to break.

The patentees then explained how their invention overcame these problems associated with using a moving platform (id. at 4):

In accordance with the <u>present invention</u>, the number of wires required between the stationary computer and the <u>moving heating elements</u> is substantially reduced by mounting additional temperature controller electronics on the <u>moving platform</u> to regulate the electrical power to the heating elements in response to data received from the computer.¹²

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 $^{^{12}}$ See also Chin Ex. 10 at 3 ("the claims under consideration are directed to a specific implementation of such independent control of heating elements <u>on a moving platform</u>"); id. ("As the number of heaters <u>on the moving platform</u> increases, it becomes impractical to electronically control (continued...)

The patentee's reference to the "present invention" in these submitted remarks is strong evidence that the invention is limited to heating elements on a moving platform. See SciMed, 242 F.3d at 1343 ("the characterization of the coaxial configuration as part of the 'present invention' is strong evidence that the claims should not be read to encompass the opposite structure").

The Patent Office again rejected the claims as obvious in a second Office Action. Chin Ex. 11. In response, the patentees submitted an Amendment, dated September 3, 2002, by which application claims 6-9 were added. Chin Ex. 12 at 3. There, the patentees continued to emphasize the importance of the moving platform to their invention, and further distinguished their invention from the prior art by explaining that the moving platform of their invention is a rotary carousel. In particular, the patentees stated that in their claimed system (id. at 5):

> the microscope slides are positioned on a <u>carousel which allows</u> <u>individual slides to be moved into position</u> below a dispensing station from which a microvolume of a reagent may be applied. Other stations allow for washing with bulk solutions, extraction of fluids and the like. It is to such systems, which allow for convenient microvolume fluidic handling, to which the present invention is directed.

In contrast to their claimed invention, the patentees yet again criticized the prior art for utilizing stationary slide platforms. They proclaimed that "Horne teaches away from the present invention in teaching stationary heaters" (id. at 7), and further stated that they had "rejected the fixed station approach of Muller et al. in favor of the more flexible fluid handling of slides positioned on a moving platform." Id. at 6. On this basis, the patentees argued that

them via direct connections to a stationary computer."); id. at 4 ("the data is then decoded by the temperature control circuitry on the moving platform"); id. (Bogen prior art "has failed to suggest temperature control circuitry mounted on the moving platform"); id. ("there is no suggestion in any of the references of a temperature controller mounted on the moving platform"); id. ("there is no suggestion in Muraishi [prior art] of providing slide heaters on a moving platform"); id. at 5 ("Muller et al. and Potter et al. fail to suggest the independent temperature regulation by controller circuitry on the moving platform").

"one would not look back to Muller et al. for a teaching of how to handle samples on the moving platform," and (*id.*):

Thus, there is no suggestion in the prior art of heating individual slides to different temperatures where those <u>slides are mounted on a moving platform as required by each of the pending claims</u>.

By repeatedly and consistently focusing on movement of the slide platform, the patentees expressly rejected the "relative movement" construction that CytoLogix now advances.¹³ Indeed, the patentees explained (contrary to CytoLogix's present position that only the dispenser need be moved) that moving only the liquid dispenser was both undesirable and known in the prior art: "One solution, of course, has been to use robotics to move syringe elements into place. However, such systems are complex." *Id.* at 5. Instead, the patentees said that "the present invention is directed" to "such systems" where "slides are positioned on a carousel which allows individual <u>slides to be moved into position</u>." *Id*.

On September 12, 2002, the patentees met with the Patent Examiner to present a "general display of prior manual staining techniques." Chin Ex. 13. CytoLogix's motion relies heavily on the handwritten Interview Summary notes, inferring from the absence of the term "moving" that movement was "not the basis for the examiner allowing these claims to issue." Pl. Mem. at 12. The premise of this argument is flawed, because "[a]n applicant's argument made during prosecution may lead to a disavowal of claim scope even if the Examiner did not rely on the argument." Seachange Int'l, Inc. v. C-COR Inc., 413 F.3d 1361, 1374 (Fed. Cir.

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¹³ See also Chin Ex. 12 at 5 ("To date, systems in which the microscope slides are placed on a moving platform have not provided for individual heating of those slides."); *id.* at 6 ("Muller et al. relates to a system having stationary sample chambers"); *id.* ("Potter et al., like Muller et al., merely discloses a stationary, heated slide support"); *id.* ("applicants provided processing electronics on the moving platform to control the power to the individual heaters"); *id.* at 7 (it is "not suggested in the prior art that individual temperature control be provided to slides on a moving platform"); *id.* ("there is no suggestion of mounting the electronic circuitry on the moving platform"); *id.* ("In looking at either Muller et al. or Horne, one would see stationary heaters and would thus not look for a solution to the problem of Bogen et al. of heating samples on microscope slides located on a moving platform."); *id.* ("Horne teaches away from such a combination since Horne teaches that samples and their heaters should be stationary").

2005); see also Springs Window Fashions LP v. Novo Indus., L.P., 323 F.3d 989, 995 (Fed. Cir.

CytoLogix's revisionist history is also contradicted by the public record.

2003) ("examiner's remarks do not negate the effect of the applicant's disclaimer").

To begin with, nowhere in the Interview Summary does the Patent Examiner state the reasons for allowing the claims. The reason is plain. As of the September 12, 2002 interview, the Examiner had not yet decided whether to allow the claims. Indeed, after the interview but before the claims were ever allowed, the patentees submitted a Supplemental Amendment dated October 4, 2002. Here, application claims 6-7 were presented, for the first time, in the precise form that ultimately issued as the asserted claims 1-2. Chin Ex. 14 at 2.

In the remarks accompanying the Supplemental Amendment, the patentees explained that "the present invention" as reflected in the amended claims is directed to "carousel systems" that "permit slides to be indexed to dispensing stations where small volumes of reagent may be dispensed onto the slides." Id. at 3. As explained above, in the engineering context, "indexing" requires rotation and "intermittent motion," where the slides "move from one predetermined position to another." Chin Ex. 22 at 854; see also Chin Ex. 19 at 79:18-21. But the patentees did not stop there. They further stated that their invention was specifically developed to address the needs of carousel systems (Chin Ex. 14 at 3-4):

> The present invention was developed to address the needs of another class of biological analysis, generally referred to as special stain techniques, for which carousel systems had not previously been used. Prior to automation, special stain techniques often required judgments on the part of the technician, such as color analysis.... Because such techniques rely highly on the skills of the technician, and are considered an art, they had not been considered appropriate for automatic processing using a carousel type system.¹⁴

¹⁴ On page 11 of its opening memorandum, CytoLogix relies upon a passage from the Supplemental Amendment as purported support for its "relative movement" position. Pl. Mem. at 11. In this passage, the patentees stated that "a liquid dispenser and a slide supporting platform are moved relative to each other in order to dispense liquid on the slide." Id.; see Chin Ex. 14 at 4-5. However, this passage, like the claims themselves, indicates that both the slide platform and the liquid dispenser must move. By using the plural form of the verb ("are moved"), the patentees indicated that at least two objects (i.e., (continued...)

After receiving the Supplemental Amendment, which was submitted long after the September 12 interview, the Examiner finally decided that the claims were allowable. Consequently, on December 11, 2002, the Examiner issued his Reasons for Allowance. In that document, the Examiner expressly stated the scope of the claims he was allowing, which statement was entirely consistent with the patentees' repeated statements that the invention required the use of a moving slide platform (Chin Ex. 15 at 2):

> The claims as now amended are directed to methods for processing samples which includes both dispensing of fluids onto movable sample slides and simultaneously heating different sample slides to different temperatures.

At the conclusion of these unambiguously stated Reasons for Allowance, 15 the Examiner invited the patentees to make any submission they deemed appropriate if their understanding of the claims differed from the Examiner's. Id.; see also 37 C.F.R. § 1.104(e). The patentees did not make any further submission, thus confirming their concurrence with the Examiner's statements concerning the scope of the allowed claims.

The foregoing public record regarding the '261 patent establishes that "moving the platform and a liquid dispenser relative to each other" requires a moving rotary carousel platform. Because the patentees argued for a narrow construction of the claim language in order to obtain their patent, CytoLogix cannot now be permitted to argue a broader construction for purposes of asserting infringement. See Jeneric/Pentron, Inc. v. Dillon Co., 205 F.3d 1377, 1382 (Fed. Cir. 2000); Southwall, 54 F.3d at 1576. The notice function of a patent requires that competitors be able to rely on the applicants' statements in the

slide platform and liquid dispenser) move. See Chin Ex. 19 at 58:24-59:6. When confronted with this passage, an inventor of the '261 patent testified: "Q. Does that [passage] tell you that both of them are moved relative to each other? A. In that sentence, yes." Id. at 60:3-5.

¹⁵ Pursuant to Section 1302.14 of the MANUAL OF PATENT EXAMINING PROCEDURE, information in the Reasons for Allowance "facilitates evaluation of the scope and strength of a patent by the patentee and the public and may help avoid or simplify litigation of a patent." Chin Ex. 24 at 1300-13. As the Patent Office explains: "The examiner's statement of reasons for allowance is an important source of prosecution file history." 65 Fed. Reg. 54,604, 54,633 (P.T.O. Sept. 8, 2000) (Chin Ex. 25).

prosecution history. Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc., 222 F.3d 951, 957 (Fed. Cir. 2000). The import of the prosecution history "must be determined by what a competitor would reasonably believe that the applicant had surrendered." Ballard Med. Prods. v. Allegiance Healthcare Corp., 268 F.3d 1352, 1361 (Fed. Cir. 2001) (citation omitted). Here, a reasonable competitor would take the patentees at their oft-repeated word: their invention was developed to address the particular needs of moving, carousel slide systems where the rotating carousel carrying the slides also contains individually controllable heaters.

D. The Slide Platform is Moved from One Position to Another for Dispensing Liquids

The slide platform moves "in order to dispense liquid on the slide."

In the asserted claims, the step that calls for "moving the platform and a liquid dispenser relative to each other" is immediately followed by the step of "dispensing liquid from the dispenser onto the [two or more] slides" recited in the first step of the claim (i.e., "placing two or more microscope slides on a platform"). Thus, movement of the slide platform and the liquid dispenser is what allows the dispenser to dispense liquid onto the "two or more microscope slides" that were placed on the platform. Chin Ex. 1 at 12:16 & 12:21-23. Accordingly, the claims must be construed to require that the slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide.

In addition to the plain language of the claims, the patent specification and prosecution history also clearly link movement of the slide platform to the step of dispensing liquid onto two or more slides. For example, the patent specification explains that "precisely measured amounts of reagent" may be dispensed "to any slide positioned underneath the cartridge pump 46 adjacent to the actuator 26." Id. at 5:32-35. Similarly, the prosecution history explains that the slide platform is moved "in order to dispense liquid on the slide." Chin Ex. 14 at 4-5. Because the asserted claims require "two or more slides," and call for

"dispensing liquid from the dispenser onto the slides" (plural), Chin Ex. 1 at 12:16-23, the slide platform must be moved from one position to another position for the dispensing onto the two slides to occur.

This conclusion is reinforced by CytoLogix's own argument concerning "the importance of indexing" to the invention. Pl. Mem. at 9. The importance of indexing was repeatedly emphasized in the prosecution history. For example, in describing the advantages of "carousel systems" for which their invention "was developed" (Chin Ex. 14 at 3-4), the patentees explained that such systems "permit slides to be indexed to dispensing stations." *Id.* at 3. Similarly, the patentees argued that the claims were patentable because their slide heating system was not previously used "by indexing the slides relative to reagent dispensers." *Id.* at 4. And finally, the patentees also argued that the prior art was "not compatible with systems having indexing between the slides and a dispenser to dispense liquid onto the slides" and, therefore, could not be combined with a system where "reagent can be dropped from a dispenser onto a desired slide that was indexed to the dispenser." *Id.* at 5. These passages confirm that the purpose of "moving the platform," as called for by the claims, is to index the slides to the liquid dispenser – that is, to "move from one predetermined position to another." Chin Ex. 22 at 854.

V. THE PROPER CONSTRUCTION OF "PLATFORM"

"In such a system, microscope slides are positioned on a carousel.... It is to such systems ... to which the present invention is directed."

Consistent with the specification and the prosecution history, the term "platform" should be construed to mean a rotary carousel. Although the patentees do not use the form "I define platform to mean a rotary carousel," such "rigid formalism" is not required by the Federal Circuit. *Astrazeneca*, 384 F.3d at 1339. Rather, the definition arises because the "patentee uses a claim term throughout the entire patent specification, in a manner consistent

with only a single meaning." *Bell Atl. Network Serv., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1271 (Fed. Cir. 2001).

The rotary carousel is described at the outset of the '261 patent in the abstract of the invention. The abstract states that the invention is for use in "[a]n automated slide stainer with slides mounted in a horizontal position on a <u>rotary carousel</u>." Chin Ex. 1 (Abstract).

Thereafter, in the body of the specification, the patentees describe two, and only two, embodiments of their invention. The "first embodiment 1 of the invention" uses a "<u>slide</u> rotor 3 rotatable on the assembly base 2" that "is <u>driven to rotate</u> by a servo motor." *Id.* at 3:56-62. This slide platform is shown as a rotary carousel. *Id.*, Fig. 1 (item 3). A service loop, used to power and control the heating circuitry, is provided with sufficient length "so that as the slide rotor rotates, the service loop travels around the slide rotor axis." *Id.* at 5:3-6.

The second embodiment of the invention "also comprises two independent <u>carousels</u> that rotate on an assembly base 56," *i.e.*, one carousel for the slides and a second for the liquid dispensers. *Id.* at 7:46-47. The design of the second embodiment "allow[s for] <u>free rotation of the slide rotor 77." *Id.* at 8:33.¹⁶</u>

The prosecution history of the '261 further confirms that "platform" refers to a rotary carousel. The problem overcome by the invention, according to the patentees, was that the

¹⁶ CytoLogix may argue that patentees' statement, that the moving plating is "preferably a carousel," Chin Ex. 1 at 2:30-31, somehow implies that other types of platforms are permitted as well. Such an argument would fail. The Federal Circuit has held that "[t]he usage 'preferred' does not of itself broaden the claims beyond their support in the specification." Wang Labs., Inc. v. America Online, Inc., 197 F.3d 1377, 1383 (Fed. Cir. 1999).

¹⁷ The patentee's remarks in prosecuting the parent '693 patent also confirm the proper meaning of the term "platform," as used in the claims of the '261 patent. As explained above, the prosecution history of the parent '693 patent, which shares an identical specification, is highly relevant to construction of claims of the '261 patent. See page 15, supra. Like the '261 patent, the parent '693 patent uses the very same term, "platform," in its claims. See Chin Ex. 2 at 12:13.

In prosecuting the parent '693 patent, the patentees explained that their invention "provides a solution to the problem" of a wiring configuration that "prevents the <u>rotary carousel</u> from moving freely." Chin Ex. 3 at 4. Likewise, during reexamination of the '693 patent, the patentees argued for the patentability of the claims on the basis that "<u>carousel systems</u> at the time generally used convective (continued...)

did not.").

wiring in prior art systems was stiff, "precluding smooth carousel revolution and indexing." Chin Ex. 10 at 4. The patentees described systems where "microscope slides are positioned on a carousel which allows individual slides to be moved into position below a dispensing station from which a microvolume of reagent may be applied.... It is to such systems, which allow for convenient microvolume fluidic handling, to which the present invention is directed." Chin Ex. 12 at 5. In fact, the patentees distinguished the prior art from "the present invention" on the grounds that "carousel systems had not previously been used" to address the needs for which their invention was developed. Chin Ex. 14 at 3. And in reference to the pending claims (including, specifically, application claim 6 in the form that it issued as asserted claim 1), the patentees stated (id. at 4):

> Because such [prior art] techniques rely highly on the skills of the technician, and are considered an art, they had not been considered appropriate for automatic processing using a carousel type system.

Additionally, as discussed above, the patentees' keen focus on "indexing" likewise confirms that the slide platform must be defined to be a rotary carousel. In prosecuting the parent '693 patent, with claims that used the same term ("platform"), the patentees explained that "an important inventive step" of their invention permitted "indexing samples across a

heating to a common temperature," and therefore a person of ordinary skill in the art "would not have

seen the need or advantage of control of those separate units to different temperatures and would thus not have added the necessary additional control circuitry and its attendant complexity and cost on a moving carousel." Chin Ex. 7 at 4. In particular, one would not have looked to the Muller prior art "to deal with a problem in heating many more slides heating elements on a moving carousel." Id. at 13; see also id. at 5 ("The present invention was developed to address the needs of another class of biological analysis, generally referred to as special stain techniques, for which carousel systems had not previously been used."); id. at 5-6 ("Because such techniques rely highly on the skills of the technician, and are considered an art, they had not been considered appropriate for automatic processing using a carousel type system."); id. at 10 ("Unlike electrical wires, it would be difficult to supply a flexible coolant line and flexible supply line from the reservoirs between the stationary base and moving platform (e.g., rotary carousel) of sufficient diameter so as to supply different liquids to many different slides without twisting or kinking the tubing."); id. ("The plumbing would have to account for fluid flowing both on and off the rotary carousel, so at least two lines would be required."); id. ("Moreover, the plumbing would have to be sufficiently thin so as to avoid causing a frictional drag on the free rotation of the rotary carousel, but wide enough to supply an adequate amount of liquid."); id. at 13 ("Muller

could have and would likely have done the same had he considered a carousel implementation, which he

wide variety of reagents and buffer." Chin Ex. 3 at 6. Likewise, in prosecuting the '261 patent, the patentees explained that "the present invention" is directed to "carousel systems" that "permit slides to be indexed to dispensing stations where small volumes of reagent may be dispensed onto the slides." Chin Ex. 14 at 3; see also Section IV.D, supra; Pl. Mem. at 9 ("the importance of indexing"). By definition, to "index" requires the platform "[t]o rotate through a given aliquot part of a complete turn." Chin Ex. 22 at 854 (parenthetical omitted). This requirement was confirmed by Mr. Loeffler, a named inventor of the '261 patent:

- Q. And what is your understanding of this term indexing the slides and the reagents to dispense reagent onto the slide?
- A. Rotating the carousels.

Chin Ex. 19 at 79:18-21. It is thus plain that the patentees implicitly defined the claimed "platform" to be a rotary carousel. See Southwall, 54 F.3d at 1576.

VI. CYTOLOGIX'S MOTION SHOULD BE DENIED

A. Legal Standards

CytoLogix bears the burden of proving that the accused devices perform every element of the asserted claims, as properly construed. Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533, 1535 (Fed. Cir. 1991). "There can be no infringement as a matter of law if a claim limitation is totally missing from the accused device." London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1539 (Fed. Cir. 1991). The determination of infringement is a question of fact. Gart v. Logitech, Inc., 254 F.3d 1334, 1339 (Fed. Cir. 2001).

All reasonable inferences must be drawn in favor of Ventana, the nonmovant. In re Varrasso, 37 F.3d 760, 763 (1st Cir. 1994). "The party who has the burden of proof on a dispositive issue cannot attain summary judgment unless the evidence that he provides on that issue is conclusive." Torres Vargas v. Santiago Cummings, 149 F.3d 29, 35 (1st Cir. 1998).

B. CytoLogix Fails to Indisputably Prove that the Accused Devices Perform "Moving the Platform and a Liquid Dispenser Relative to Each Other"

As explained above, the claim language "moving the platform and a liquid dispenser relative to each other" should be construed to mean moving the platform relative to a liquid dispenser and also moving a liquid dispenser relative to the platform. The slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide. See Section IV, supra.

Thus to establish infringement, CytoLogix must adduce evidence that the slide support in the accused devices moves in the manner required by the claims. CytoLogix, however, has not done so. Indeed, CytoLogix has not even alleged on this motion that the slide support moves at all in the accused devices. See Pl. Mem. at 16 (table, row 1). Nor could it. The undisputed evidence, submitted by CytoLogix, establishes that "the slides don't move once they're fixed in place and the run begins, there's no motion." Zeliger Ex. 2 at 47:15-17. The slides are held stationary by "40 pounds per square inch of pressure in four locations against that [i.e., the slide support] to hold it in place very, very securely." Id. at 60:7-9.

CytoLogix' failure of proof dooms its motion. Accordingly, summary judgment of infringement must be denied, for this reason alone. 19

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 $^{^{18}}$ On page 18 of its brief, CytoLogix asserts that there is "movement of the carousel (i.e., the platform): 'The carousel is able to rotate either clockwise or counterclockwise.'" Pl. Memo at 18. However, this reference is to the <u>reagent</u> carousel, not the slide support. *See* Pl. Stat. ¶¶ 37-38; Zeliger Ex. 10 at 14 (VM000453). The reagent carousel is where the liquid dispensers are mounted. The reagent carousel is not a platform on which "two or more microscope slides" are placed, as required by the claims. Chin Ex. 1 at 12:16.

¹⁹ Should CytoLogix attempt to adduce such evidence in its reply brief, such an attempt would be improper. Under that circumstance, Ventana either will move to strike and/or in the alternative, to file a sur-reply brief.

C. CytoLogix Fails to Indisputably Prove that the Accused Devices Use the Claimed "Platform"

The claim term "platform" should be construed to mean a rotary carousel. See Section V, supra.

The slide support in the accused devices is not rotary.²⁰ Rather, during a staining run in the accused devices, the slide support is fixed and motionless. Zeliger Ex. 2 at 47:15-17 & 60:5-9. CytoLogix makes no effort to set forth any facts to establish that the accused devices use a rotary carousel on which slides are placed. The claims as properly construed require a rotary carousel. Accordingly, CytoLogix's motion for summary judgment must be denied for this reason as well.

VII. CONCLUSION

For the foregoing reasons, Ventana respectfully requests the Court to deny CytoLogix's motion for summary judgment of infringement.

Dated: April 4, 2006 VENTANA MEDICAL SYSTEMS, INC.

By its attorneys,

/s/ Roger J. Chin

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²⁰ A "rotary" carousel is "characterized by rotation." Chin Ex. 20 at 1516.

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APPENDIX

'261 Patent, Claim 1

A method of processing samples mounted on microscope slides comprising:

placing two or more microscope slides on a *platform*;

providing heating elements capable of heating said slides, said heating elements being under independent electronic control and thereby capable of heating some slides to a different temperature than other slides:

moving the platform and a liquid dispenser relative to each other;

dispensing liquid from the dispenser onto the slides; and

on the *platform*, heating one slide to a different temperature than a second slide.

Ventana's Proposed Constructions

The phrase "moving the platform and a liquid dispenser relative to each other" should be construed to mean moving the platform relative to a liquid dispenser and also moving a liquid dispenser relative to the platform. The slide platform moves from a first position in which liquid is dispensed from a dispenser onto a first slide, to another position in which liquid is dispensed from that same dispenser onto a second slide.

The term "*platform*" should be construed to mean a rotary carousel.

CERTIFICATE OF SERVICE

I hereby certify that this document filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non registered participants on April 4, 2006.

/s/ Roger J. Chin Roger J. Chin